SOLOMONINSKAYA, T.N.; BAGROV, Ya.Yu.; BALONOV, L.Ya.

Analysis of the effect of the phylogenetically ancestral brain systems on the electrical activity of the cerebral cortex. Zhur. evol. biokhim. i fiziol. 1 no.3:281-289 My-Je '65. (MIRA 18:7)

1. Laboratoriya sravnitel'noy fiziologii tsentral'noy nervnoy sistemy i laboratoriya patologii vysshey nervnoy deyatel'nosti cheloveka Instituta evolyutsionnoy fiziologii i biokhimii imeni Sechenova AN SSSR, Leningrad.

Category : USSR/Solid State Physics - Mechanical properties of crystals and polycrystalline compounds E-9

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 1377

Author : Borin, F.A., Sollertinskaya, Ye.S.
Inst : Moscow Inst. for Nonferrous Metals and Gold, USSR
Title : Influence of Zirconium on Certain Properties of Magnesium Alloys

Orig Pub : Metallovedeniye i obrabotka metallov, 1956, No 2, 8-13

Abstract : An investigation was made of the effect of Zr on the mechanical properties grain size, and corrosive properties of Mg-Zr and Mg + 4.1 — 4.8% Zn + Zr alloys. It is shown that Zr increases considerably the mechanical properties of the die-cast Mg-Zn-Zr alloys and the corrosion resistance of Mg-Zr alloys. A refining action by zirconium on the magnesium alloys is noted.

Card : 1/1

80216

S/126/60/009/04/011/033
E021/E435

The Influence of Small Additions of Zinc on the Preference of Crystallographic Directions of Growth of Aluminium Crystals from the Melt

This is shown more clearly in macrophotographs of cross sections at various stages shown in Fig 5. This confirms the hypothesis of selective absorption of zinc by the (111) planes of aluminium, which leads to an increase in the preference of growth in the [111] direction in relation to the [100] direction. There are 9 figures and 10 references, 2 of which are Soviet, 7 English and 1 German.

ASSOCIATION: Institut „Giprotsvetmetobrabotka"
(Institute „Giprotsvetmetobrabotka")

SUBMITTED: July 2, 1959

Card 2/2

LAYNER, D.I.; PETRUSEVICH, R.L.; SOLLERTINSKAYA, Ye.S.

Determining the orientation of aluminum single crystals by etching.
Zav.lab. 26 no.3:305-306 '60. (MIRA 13:6)

1. Giprotsvetmetobrabotka.
(Aluminium--Metallography)

S/181/62/004/005/053/055
B163/B136

AUTHORS: Petrusevich, R. L., Sollertinskaya, Ye. S., and Pavlova, O. I.

TITLE: Etching of dislocations in the (111) plane of gallium arsenide

PERIODICAL: Fizika tverdogo tela, v. 4, no. 5, 1962, 1378-1380

TEXT: Various etching agents and conditions were studied for the preparation of metallographic specimens of gallium arsenide in the (111) plane. Those giving positive results are entered in the following table.

Composition in vol. parts	Etching conditions	Results of etching	Remarks
HCl-3, HNO_3-1, H_2O-2	2-3 sec., boiling	The $(\bar{1}\bar{1}\bar{1})$ plane and all other planes are polished. Dislocations visible in the (111) plane as conical pits	Non-selective etchant
HF-1, HNO_3-3 H_2O-2	4-5 min, cold	Freshly prepared and cold medium gives bluish film. After boiling, some specimens are well polished in cold state	Non-selective etchant

Card 1/3

S/181/62/004/005/053/055
B163/B138

Etching of dislocations in the ...

Composition in vol. parts	Etching conditions	Results of etching	Remarks
		on all planes.	
H_2SO_4-3, H_2O_2 (30%)-1, H_2O-1	3-5 min in hot, freshly prepared etchant	All planes including $(\bar{1}\bar{1}\bar{1})$ are polished. In the (111) dislocations appear as conical pits.	Non-selective etchant
HF-1, H_2O_2 (30%)-1, H_2O-2	2-4 min cold	Dislocations appear in the (111) plane as conical pits.	Selective etchant
NaOH (5%)-5, H_2C_2 (30%)-1	2 min, boiling	Dislocations appear in the (111) plane as triangular pyramids	Selective etchant

Card 2/3

S/181/62/004/005/053/055
B163/B138

Etching of dislocations in the ...

Composition in vol. parts	Etching conditions	Results of etching	Remarks
KOH-6 g, $K_3[Fe(CN)_6]$-4 g, H_2O-50ml	0.5-1 min boiling	Dislocations appear in the (111) surface in form of triangular pyramids	Selective etchant, used for germanium
HNO_3-1, H_2O-3	1-2 min boiling	Dislocations appear in the (111) surface in form of triangular pyramids	Selective etchant

The density of the acids was: HNO_3 - 1.4 g/cm^3, H_2SO_4 - 1.84 g/cm^3, HCl - 1.19 g/cm^3, HF - 1.13 g/cm^3. There are 2 figures and 1 table.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut obrabotki tsvetnykh metallov, Moscow (State Scientific Research and Project Institute for Working Non-ferrous Metals, Moscow)

SUBMITTED: January 15, 1962 (initially), February 10, 1962 (after revision)

Card 3/3

BENDIK, M.A.; PETRUSEVICH, R.L.; SOLLERTINSKAYA, Ye.S.

Effect of dislocations on cadmium diffusion in gallium arsenide. Fiz. tver. tela 5 no.11:3247-3249 N '63. (MIRA 16:12)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov, Moskva.

S/070/63/008/002/007/017
E021/E120

AUTHORS: Petrusevich R.L., and Sollertinskaya Ye.S.

TITLE: The appearance of dislocations on (111) and ($\bar{1}\bar{1}\bar{1}$) planes of gallium arsenide single crystals by the method of etching

PERIODICAL: Kristallografiya, v.8, no.2, 1963, 243-247

TEXT: The action of various etchants on the surface of single crystals was investigated with the aim of obtaining dislocation etching pits and comparing their densities. Etching was carried out on gallium arsenide samples after sectioning single crystals along the (111) plane and polishing the faces with alumina. An $HF-HNO_3-H_2O$ mixture in the ratio 1:3:2 was used as a polishing etchant. This removed a layer 5-10 μ thick in 3-5 minutes. Various etching solutions were tried and microphotographs of the pits together with the density of etch pits for 3 reagents are given in the following table. It can be seen that the density on a (111) face decreased with subsequent etching with an inhibitor and $AgNO_3$, which may be explained by an increase in the size of pits and, in some cases, by overlapping. There are 2 figures and 1 table.

Card 1/2

L 11272-65 EWT(m)/EWP(t)/EWP(b) IJP(c)/SSD/AFWL/ASD(f)-2/RAEM(a)/ESD(t) JD

ACCESSION NR: AP4046048 S/0070/64/009/005/0722/0726

AUTHORS: Petrusevich, R. L.; Sollertinskaya, Ye. S. B

TITLE: Displaying Alpha and Beta dislocations in gallium arsenide single crystals 14 27 27

SOURCE: Kristallografiya, v. 9, no. 5, 1964, 722-726

TOPIC TAGS: dislocation effect, gallium arsenide, single crystal, etched crystal, plastic deformation

ABSTRACT: This is a continuation of earlier work by the authors (Fiz. tv. tela v. 4, 1378, 1962; Kristallografiya v. 7, 243, 1963) devoted to the etching of gallium arsenide for the purpose of disclosing dislocations. In the present article an attempt is made to differentiate between the two types of 60° dislocations that can be produced in the gallium arsenide lattice (α and β dislocations). To this end, an excess of dislocations of either type was produced in

Card 1/2

L 11272-65

ACCESSION NR: AP4046048

the crystal by plastic bending. This excess was then displayed by different etchants. The results show that on the B surface (III) of gallium arsenide, a Schell reagent with amine additives displays only α dislocations, while a Schell reagent with $AgNO_3$ displays both α and β dislocations. On the A surface (111), acid etchants display both α and β dislocations. It is still impossible to determine the relative number of α and β dislocations in the single crystal of gallium arsenide by means of etching. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: Gosudarstvenny*y nauchno-issledovatel'skiy i proyektny*y institut splavov i obrabotki tsvetny*kh metallov (State Scientific-Research and Design Institute of Alloys and Processing of Nonferrous Metals)

SUBMITTED: 28Nov63 ENCL: 00

SUB CODE: SS NR REF SOV: 002 OTHER: 005

Card 2/2

FEDOROVICH, P.I.; SOLLERTINSKAYA, Ye.S.; SHILSHTEYN, S.Sh.

Various types of etch pits in single crystals of $A_2^{II}B_2^{V}$-type compounds. Trudy Giprotsvetmetobrabotka no.24:38-43 '65. (MIRA 18:11)

BENDIK, M.A.; PETRUSEVICH, R.L.; SOLLERTINSKAYA, Ye.S.

Determining the surface deflection of cubic single crystal microsections from the plane (111) according to the shape of the etch pits. Trudy Giprotsvetmetobrabotka no.24[illegible]44-49 '65. (MIRA 18:11)

ROVENSKAYA, L.G.; SOLLERTINSKAYA, Ye.S.

Effect of the surface deflection of a microsection from the plane (111) on the detectability of α- and β-dislocations in single crystals of gallium arsenide. Trudy Giprotsvetmetobra-botki no.24:50-53 '65. (MIRA 18:11)

L 18847-66 EWT(m)/T/EWP(t) IJP(c) JD
ACC NR: AT6006471 SOURCE CODE: UR/2680/65/000/024/0038/0043

AUTHOR: Petrusevich, R. P.; Sollertinskaya, Ye. S.; Shil'shteyn, S. Sh. 43 B+1

ORG: State Scientific-Research Planning Institute of Alloys and the Processing of Nonferrous Metals (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov)

TITLE: Various kinds of etch pitting in single crystal A compounds of the type $A_{III}B_{V}$

SOURCE: Moscow. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov. Trudy, no. 24, 1965. Metallovedeniye i obrabotka tsvetnykh metallov i splavov (Metal science and the treatment of nonferrous metals and alloys), 38-43

TOPIC TAGS: gallium arsenide, indium antimonide, single crystal, etched crystal, dislocation effect, defect structure, metallographic examination, semiconducting material

ABSTRACT: Etch pitting was studied in single crystals of GaAs and InSb. The formation of small pitts on (111) surfaces and their redistribution upon heating were

Card 1/2

L 18847-66

ACC NR: AT6006471

dissociated from the larger dislocation etch pits which generally form after chemical polishing. The etching conditions for obtaining the small pits were as follows: GaAs--the polishing solution was 1 part HF, 3 parts HNO_3, 2 parts H_2O (polished at room temperature for 2 to 3 min) and the etchant for small pits was 1 part HNO_3, 3 parts H_2O, 0.5% $AgNO_3$ (at boiling point 1.5 to 2 min); InSb--1 part HF, 2 parts HNO_3 (polish at room temperature for 30 sec) and 1 part HF, 1 part H_2O_2, 8 parts H_2O, 0.5% $AgNO_3$ (etch 3 min at room temperature). Micrographs (200 and 440x) showed that the small pits became larger and formed terrace-like steps and subsequently became flat and eventually disappeared. After repolishing and etching, they reappeared in about the same number indicating that they are caused by defects extending deep into the crystals. Some crystals were heat treated at 1100 and 400°C (60 hr), cooled slowly (1 day), repolished and etched. Small pitting reappeared except for randomly depleted areas. Within the depleted zones, the larger dislocation etch pits could still be observed. These data indicated that the small pits were not caused by dislocations but by clusters of point defects. Only the point defects could have been affected by the heat treatment. Orig. art. has: 3 figures, 1 table.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 003/ OTH REF: 007

Card 2/2 vmb

ACC NR: AP7000001 SOURCE CODE: UR/0070/66/011/006/0896/0902

AUTHOR: Malikova, Ye. A.; Petrusevich, R. L.; Sollertinskaya, Ye. S.

ORG: State Scientific Research and Planning Institute of Alloys and Treatment of Nonferrous Metals (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov)

TITLE: Distribution and density of dislocations in bent and annealed gallium arsenide and indium antimonide crystals

SOURCE: Kristallografiya, v. 11, no. 6, 1966, 896-902

TOPIC TAGS: gallium arsenide, indium compound, antimony compound, single crystal, crystal dislocation, crystal lattice deformation, annealing, x ray spectroscopy

ABSTRACT: The distribution and density of α - and β -dislocations on the A surface (III) of bent GaAs and InSb crystals with different curvatures was studied by etching and with a two-crystal spectrometer. GaAs was etched with a reagent comprising (in parts) H_2O_2--1, H_2O--1, H_2SO_4--3, and InSb was etched with HF--1, HNO_3--2, CH_3COOH--3. The effect of annealing for 50 and 100 hours at 1100°C on the redistribution of dislocations was also determined. Data obtained from reflection curves generally agreed with that obtained by etching. The density of etch pits was compared with the calculated theoretical density of dislocations to determine the relative proportion of

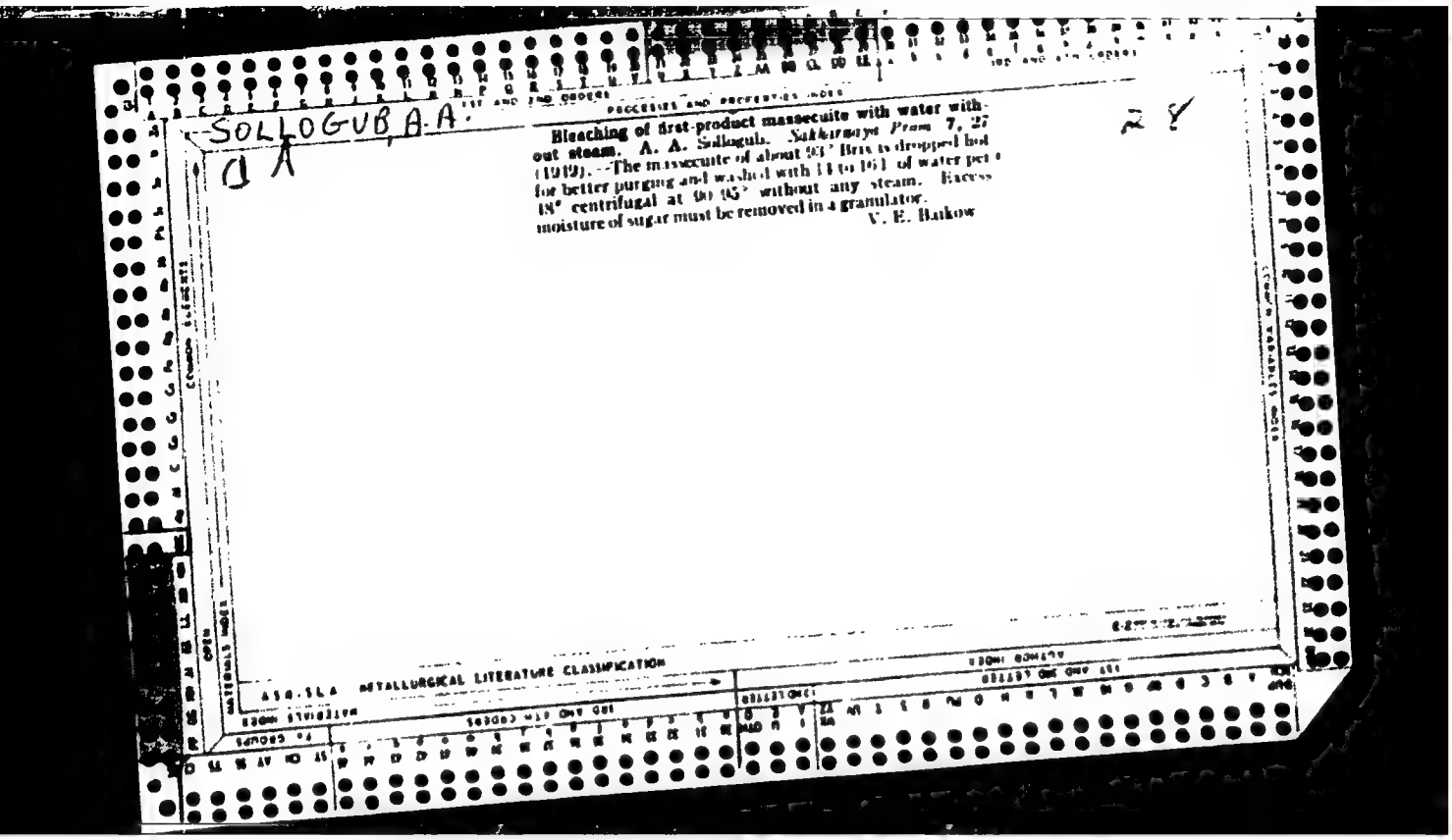
Card 1/2 UDC: 548.4

ACC NR: AP7000001

excess dislocations. In both of the bent GaAs and InSb samples the density of dislocations at the stretched and compressed surfaces was about the same, and reached a minimum halfway between (at the neutral plane of no stress). On annealing GaAs with excess dislocations, the density of dislocations leveled out throughout the sample cross section, and the number found approached the theoretical, i.e., their relative proportion approached 100%. On annealing InSb there was a difference in the redistribution of etch pits: the density of α-dislocations leveled out, but that of β-dislocations decreased. The relative proportion of excess α-dislocations in InSb after annealing was 30%, and that of β-dislocations was 55%. Although the absolute stress in bending GaAs and InSb was the same, the relative stress for InSb was greater since its strength characteristics are inferior to those of GaAs. Orig. art. has: 3 tables, 2 equations and 5 figures.

SUB CODE: 20/ SUBM DATE: 27May65/ ORIG REF: 004/ OTH REF: 007

Card 2/2


SOLLOGUB, A.A.

Bleaching of first-product massecuite with water without steam. A. A. Sollogub. *Sakharnaya Prom.* 7, 27 (1929).—The massecuite of about 93° Brix is dropped hot for better purging and washed with 1 to 1½ l. of water per 18° centrifugal at 90–95° without any steam. Excess moisture of sugar must be removed in a granulator.

V. E. Baikow

YEREMENKO, B.A.; TSENZURA, A.I.; BAZHAL, I.G.; SUSOROV, B.G.; SOLLOGUB, A.A.; BELIK, Yu.N.

Automation of evaporation sections. Sakh. prom. 35 no.11:39-45 N '61. (MIRA 15:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut sakharnoy promyshlennosti (for Yeremenko, TSenzura, Bazhal, Susorov).
2. Ust'-Labinskiy zavod (for Sollogub, Belik).
(Sugar machinery) (Automation)

SOLLOGUB, A.A.

Technical and economic indices of the automation of single production sections of the Ust-Labinskaya sugar factory. Sakh.prom. 37 no.2: 30(110)-34(114) F '63. (MIRA 16:5)

1. Ust'-Labinskiy sakharnyy zavod.
(Automation) (Ust-Labinskaya--Sugar industry)

SOLLOGUB, A.A.

Modernization of the inclined type double helix diffuser. Sakh. prom. 37 no.5:37-40 My '63. (MIRA 16:6)

1. Ust'-Labinskiy sakharnyy zavod. (Diffusers)

SOLLOGUB, A. N.

Acorns

Storing acrons. Les. khoz. 5 No. 9, 1952

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

SOLLOGUB, V.B.

Modifications of the average velocity of elastic oscillation propagation in the region of frontal depression of the Alpine geosyncline region. Dokl.AN SSSR 94 no.3:545-548 Ja '53. (MLRA 7:1)

1. Predstavleno akademikom D.V.Nalivkinym.
(Carpathian mountains--Geology) (Geology--Carpathian mountains)

SOLLOGUB,V.B.

The tectonic structure of the depression of the Carpathian foothills from seismic research data. Dop. AN URSR no.3:290-295 '55. (MLRA 8:11)

1. Institut geologichnikh nauk Akademii nauk URSR. Predstaviv diysniy chlen Akademii nauk URSR V.G.Bondarchuk
(Carpathian Mountain region--Geology, Stratigraphic)

SOLLOGUB, V.B., RAYKHER, L.D.

Some recommendations for conducting seismic observations in borehole testing. Razved.i okh.nedr 21 no.6:43-46 N-D '55. (MLRA 9:12)

(Prospecting--Geophysical methods)

Sollogub, V. B.

USSR/Geology

Card 1/1 Pub. 22 - 41/54

Authors : Sollogub, V. B.

Title : The boundary of the outer and inner zones of the Carpathian depression

Periodical : Dok. AN SSSR 102/5, 1005-1008, Jun 11, 1955

Abstract : Geological-mineralogical data are presented regarding the outer and inner zone boundaries of the Carpathian mountains in western Ukraine. Five USSR references (1947-1954). Graph; diagram.

Institution : .....

Presented by : Academician D. V. Nalivkin, January 15, 1955

SOLLOGUB, V.B.

Tectonic structure of the cis-Carpathian depression based on seismic surveying data. Trudy Inst. geol. nauk AN URSR. Ser. geogiz. no.1:3-20 '56. (MLRA 10:8)
(Ukraine--Geology, Structural)

SOV/124-57-7-8294

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 7, p 130 (USSR)

AUTHOR: Sollogub, V. B.

TITLE: The Elastic Properties of the Rock in the Region of the Foretroughs of the Alpine Geosyncline in the European Portion of the U. S. S. R. (Upругiye svoystva gornykh porod v rayone peredovykh progibov Al'piyskoy geosinklinal'noy oblasti Yevropeyskoy chasti SSSR)

PERIODICAL: Tr. In-ta geol. nauk AN UkrSSR, ser. geofiz., 1956, Nr 1, pp 93-126

ABSTRACT: Bibliographic entry

Card 1/1

SOLLOGUB, V.D.

Some data on the elastic properties of rocks found in the Moldavian S.S.R. Dop. UN URSR no.4:370-374 '56. (MLRA 9:12)

1. Institut geologichnikh nauk Akademii nauk URSR. Predstavleno akademikom Akademii nauk USSR V.G. Bondarchukom.
(Moldavia--Geology, Structural)

SOLLOGUB, V.B.

Conducting seismic prospecting in the outer zone of the Carpathian piedmont fault. Geol.zhur. 16 no.3:52-61 '56. (MLRA 9:11)
(Carpathian Mountain region--Prospecting--Geophysical methods)

D'YACHKOVA, A.Ya.; SOLLOGUB, V.B.

Tracing faults by the seismic method using reflected waves in the outer zone of the Carpathian piedmont fault. Razved.i okh.nedr 22 no.8:37-42 Ag '56. (MLRA 9:11)

1. Institut geologicheskikh nauk Akademii nauk USSR i trest "Ukrneftegeofizika."
(Seismology)
(Carpathian Mountain region--Prospecting--Geophysical methods)

VOPILKIN, O.O. (Kiiv); GALUSHKO, P.Ya. (Kiiv); SOLLOGUB, V.B. (Kiiv).

Seismic method for measuring stresses in salt mine pillars [with summary in Russian]. Prykl.mekh. 3 no.2:229-232 '57. (MLRA 10:9)

1. Kiivs'kiy politekhnichniy institut.
(Salt mines and mining)

PA - 2653

AUTHOR: SOLLOGUB,V.B., GALUSHKO,P.YA., VOPILKIN,A.A., PATIOKHA,A.M.

TITLE: On Certain Factors Influencing the Rate of Propagation of Elastic Vibrations in Rocks. (O nekotorykh faktorakh, vliyayushchikh na velichinu skorosti rasprostraneniya uprugikh kolebaniy v gornykh porodakh, Russian).

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 1, pp 82 - 85 (U.S.S.R.)

Received: 5 / 1957 Reviewed: 6 / 1957

ABSTRACT: The present paper investigates one of the most important factors influencing the velocity of layers, namely the static stress of higher layers. For the study of the connection between the velocity and static stress the authors carried out measurements of velocity rock samples which were subjected to different pressures. In labera- tory investigations of the propagation of longitudinal elastic vibrations an impulse supersonic seismoscope was used. From the laboratory investigations discussed here and from the results of seismic observations in drill holes the following inferences can be drawn: The static stress of higher layers influences the proper- ties of the different dispositions considerably. The higher the stress, the higher is the propagation velocity of elastic vibrations in rock. If the rock resembles a perfect elastic body, velocity depends only upon static stress and not upon geological processes

Card 1/2

On Certain Factors Influencing the Rate of Propagation of Elastic Vibrations in Rocks. PA - 2653

which have taken place in this region. Rocks differing from these perfect elastic bodies have a remanent deformation. That is why the propagation velocity observed does not only depend upon the depth of the layer but also upon preceding geological history. The propagation velocity of rocks of equal age in different regions can therefore even be different if they are located in the same depth. A detailed analysis of velocities in rocks may offer indications as to the geological structure of the regions investigated and as to major disturbances in depositions.
(2 illustrations)

ASSOCIATION: Geological Institute of the Academy of Science of the Ukrainic SSR.
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress.

Card 2/2

Sollogub, V. B.

AUTHOR Sollogub, V.B.

TITLE On the S-W Boundary of the Russian Platform. (K voprosu o yugo-zapadnoy granitse Russkoy platformy).

PERIODICAL Doklady Akademii Nauk, 1957, Vol. 115, Nr 3, pp. 605 - 608 (USSR.).

ABSTRACT In recent time geological and geophysical investigations were carried out to a great extent at the south- and south western end of the Russian platform. In present paper the author tries to define precisely on this basis some opinions on the boundary of the south western slope of the platform with the through-bend placed before. The position as well as the character of structure of the deposit zone of the upper regions is in the first place determined by the behaviour of the crystalline basis. In the west of the Ukrainian S.S.R. the deposit of the platform to the through-bend forms a zone which takes the direction north west - south east which contains Yavorov, Gorodok, Zhidachev, Kalush, Bogorodchany, Otynya and the south west of Chernovtsy. It is characterized by an abrupt depression of the meso-palaeozoic rock complex of a depth of from 1500 - 2000 m as an entire series of displacements. Further details of the district are described in detail. The district of Botoshany is rather complicated. Here two directions of tectonic disturbations cross: a north western and a meridional one. In the district of Baku the south western end of the Russian platform deviates in its course from the meridional direction and takes a south eastern direction. The jurassic through-bend before the Dobrudzha sinks in north

Card 1/3

On the South-Western Boundary of the Russian Platform

western direction into a considerable depth. The relief of the crystalline basis in the district of the southern slope of the Ukrainian shield (Ungeny-Voznesensk) is described by the contour lines of terrain drawn by the author. In the area of the deposit zone of the platform to the jurassic through-bend the crystalline basis sinks some kilometers in order to form the through-bend placed before. Summarizing, it must be said that the south western flank of the Russian platform which reaches from Yavorov to the Dnestr-Liman has a very complicated structure. This is expressed by the fact that the platform borders on through-bends which differ in age. In the north west of the district there is a tertiary through-bend, in the Moldavian SSR - a jurassic one, and a cretaceous through-bend in the vicinity of the Black Sea. The mentioned structure is caused also by a series of disjunctive disturbations. They are expressed in the platform, especially in the Ukrainian shield as well as in the through-bends which seam the south western end of the Russian platform. The displacement and alteration of the boundary in question occurs in the districts of crossing of displacements of various directions.
(There are 1 figure, 5 Slavic references).

ASSOCIATION Institute for Geological Science of the AN of the Ukrainian SSR. (Institut geologicheskikh nauk Akademii nauk USSR.).

20-3-51/59

On the South-Western Boundary of the Russian Platform.

PRESENTED by Academician N.S. Shatskiy, December 10, 1956.

SUBMITTED June 18th, 1956.

AVAILABLE Library of Congress.

Card 3/3

KRAVETS, Valentin, Vasil'yevich [Kravets', V.V.]; SOLLOGUB, V.B., kand. geol.-min.nauk, otv.red.; MEL'NIK, G.F., red.izd-va.; SKLYAROVA, V.Ye. [Skliarova, V.IE.], tekhn.red.

[Using the high-frequency seismic prospecting method for studying the tectonics of the western part of the Ovruch Ridge] Zastosuvannia vysokochastotnoi seismichnoi rozvidky dlia vyvchennia tektoniky zakhidnoi okrainy Ovruts'koho masyvu. Kyiv, Vyd-vo Akad. nauk Ukr. URS., 1958. 31 p. (Akademiia nauk URSR, Kiev. Institut geologichnykh nauk. [Trudy]. Seriia geotektoniky i geofizyky, no.6) (MIRA 12:9)
(Ovruch Ridge--Geology, Structural) (Seismic waves)

SOLLOGUB, Vsevolod Borisovich; SUBBOTIN, S.I., otv.red.; MEL'NIK, G.F., red.izd-va; YURCHISHIN, V.I., tekhn.red.

[Physical properties of rocks in the southwestern and southern regions of the European part of the U.S.S.R.] Fizicheskie svoistva gornykh porod iugo-zapadnogo i iuzhnogo raionov Evropeiskoi chasti SSSR. Kiev, Izd-vo Akad. nauk. Ukr. SSR, 1958. 99p. (Akademiia nauk URSR, Kiev. Instytut geologichnykh nauk. [Trudy]. Seriia geotektoniky i geofizyky, no. 4) (MIRA 13:8)

1. Chlen-korrespondent AN USSR (for Subbotin).
(Rocks) (Seismic waves)

SOLLOGUB, V.V.

Tectonic structure of the forepart of the Dobruja bend and the southwestern boundary of the Russian Platform according to geophysical data. Trudy Inst. geol. nauk AN URSR. Ser. geofiz. no.2:15-26 '58. (MIRA 11:6)

1. Institut geologicheskikh nauk AN USSR.
(Moldavia--Geology, Structural)

SOV/169-59-5-4384

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 5, pp 15 - 16 (USSR)

24.1800

AUTHORS: Sollogub, V.B., Galushko, P.Ya., Vopilkin, A.A., Patiokhi, A.M.

TITLE: On the Propagation Velocity of Longitudinal Elastic Waves in Rocks and Its Dependence on the Static Load and on the Humidity

PERIODICAL: Tr. In-ta geol. nauk. AS USSR, Ser. geofiz., 1958, Nr 2, pp 130 - 137

ABSTRACT: Investigating the effect of the load on the propagation velocity of elastic waves, the authors exposed a rock specimen with cubic form to a one-sided compression by means of a hydraulic press. The velocities of the supersonic waves were measured in intervals of pressure of 20 kg/cm^2. The velocity of wave in sandstone increased by 5 m sec^{-1}. atm for the pressure increasing from 0 to 120 kg/cm^2. Increasing the load from 120 to 420 kg/cm^2 causes an insignificant increase of the velocity, but a further increase of the load beyond 420 kg/cm^2 causes a decrease in velocity. Under a pressure of 610 kg/cm^2, the specimen collapsed. The similar

Card 1/3

On the Propagation Velocity of Longitudinal Elastic Waves in Rocks and Its Dependence on the Static Load and on the Humidity

course of behavior of the velocity was observed by testing lime-stone, but the values of load corresponding to the points of inflection of the curve, and also the values of velocity were different. The observed variations of the velocity correspond to: 1) The decrease in the porosity under the pressure effect; 2) the redistribution of the elementary particles of the rock. A decrease in velocity with a further increase in pressure can be explained by the formation of cracks. A certain dependence exists between the density of the rocks and the propagation velocity of the elastic waves. It is possible that this dependence may be used for practical purposes. In halite specimens, the velocity of longitudinal waves perpendicular to the applied load decreased considerably with increasing pressure; but in the plane parallel to the applied load, the velocity insignificantly decreased. The saturation of the rock specimen with water increased the velocity; but the variations of velocity in chalk and for coquina were smaller than in less porous sandstone. The investigation of the variation of velocity under multiple cycles of loading and unloading showed that a residual deformation is not observed in dense rocks

SOV/169-59-5-4384

On the Propagation Velocity of Longitudinal Elastic Waves in Rocks and Its Dependence on the Static Load and on the Humidity

(sandstone). In more porous rocks the value of the velocity increases in comparison to the initial velocity in consequence of the residual deformation after taking off the load. Be repetitive pressures, velocities increase again and attain higher values than during the first cycle of loading. Consequently, it can be assumed that the velocity of propagation of elastic waves in rocks depends on the geologic history of the region in question. In regions where numerous changes of sedimentation and of denudation occurred, the rocks were submitted to a greater compression and must be characterized by a higher velocity than the similar rocks in regions where the change of the processes took place not so frequent. Bibl. 10 titles.

I.K. Kupalov-Yaropolk

Card 3/3

SOLLOGUB, V.B.

In memory of Grigorii Aleksandrovich Gamburtsev. Trudy Inst. geol. nauk AN URSR. Ser. geofiz. no.2:198-199 '58. (MIRA 11:6)
(Gamburtsev, Grigorii Aleksandrovich, 1903-1955)

GALUSHKO, P.Ya., dots., kand. tekhn.nauk; VOPILKIN, A.A., dots., kand.tekhn. nauk; SOLLOGUB, V.B., dots, kand.tekhn.nauk; YUREVICH, G.G., inzh.

Experimental investigation of the effect of blasting on the stability of stope pillars in Solotvino salt mines. Nauch. dokl. vys. shkoly; gor. delo no.3:13-19 '58. (MIRA 11:9)

1.Predstavleno kafedroy razrabotki mestorozhdeniy poleznykh iskopayemykh Kiyevskogo ordena Lenina politekhnicheskogo instituta.
(Solotvino--Salt mines and mining)
(Mining engineering)

SOLLOGUB, V.B. [Sollohub, V.B.]

Boundary of the Russian platform in the Ukrainian S.S.R. Dop. AN URSR no.6:658-660 '58. (MIRA 11:9)

1.Institut geologicheskikh nauk AN USSR. Predstavil akademik AN USSR V.G. Bandarchuk [V.H. Bondarchuk].
(Ukraine--Geology, Structural)

SOV-21-58-8-16/27

AUTHORS: Bondarchuk, V.G., Member of the AS UkrSSR, Kondrachuk, V.Yu., Krutikhovskaya, Z.A., Lebedev, T.S., Mikhaylova, N.P., and Sollogub, V.B.

TITLE: Hypsometric Chart of the Surface of the Precambrian Foundation of the UkrSSR and Some Adjacent Areas (Skhema gipsometrii poverkhnosti dokembriyskogo fundamenta USSR i nekotorykh sopredel'nykh territoriy)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 8, pp 863-866 (USSR)

ABSTRACT: The old charts of the Precambrian foundation within the Ukraine compiled by A.D. Arkhangel'skiy (Ref. 1) and other investigators, of which the most detailed is the chart by E.E. Fotiadi (Ref. 15) are mostly obsolete and do not correspond to the present level of the geologico-geophysical knowledge of the Ukraine territory. Making use of charts compiled by F.A. Rudenko, G.M. Kozlovskaya, V.T. Syabryay, K.M. Varava, R.I. Andreyeva for individual regions and based on the results of electrosurveys by V.I. Klushin, gravimetric investigations by S.I. Subotin and prospecting drilling, in 1957 the authors compiled a hypsometric chart of the surface of the Precambrian crystalline

Card 1/2

Hypsometric Chart of the Surface of the Precambrian Foundation of the UkrSSR and Some Adjacent Areas

foundation of the Ukrainian SSR and certain adjacent areas on a scale of 1 : 750,000. The contemporary surface of the Precambrian foundation has a peculiarly disjointed relief which in its fundamental features accords with the features of the tectonic structure of the areas considered.
There is 1 geological chart and 16 Soviet references.

ASSOCIATION: Institut geologicheskikh nauk AN UkrSSR (Institute of Geological Sciences of the AS UkrSSR)

SUBMITTED: March 18, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration,

1. Geology--USSR 2. Geophysics--USSR

3(5) SOV/21-59-3-17/27

AUTHOR: Sollogub, V.B.

TITLE: Some Data on the Block Structure of the South of the Ukrainian SSR (Nekotoryye dannyye o blokovom stroyenii yuga Ukrainskoy SSR)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 3, pp 301-305 (USSR)

ABSTRACT: Using reference material as a background, the author examines the structure of the Pre-Cambrian foundation of the southern slope of the Ukrainian crystalline shield and the adjoining fore-deeps, substantiating his conclusions with data obtainedby geophysical and geological survey work performed during recent years. The southern slope of the Ukrainian crystalline shield, as well as the area of the Crimea, consists of a series of sunk and raised blocks. The movements of the various blocks are different in the northern and southern areas of the zone of a single joint, i.e. if the blocks sink in the north, they rise in the south. The

Card 1/2

Some Data on the Block Structure of the South of the Ukrainian SSR

latitudinal strike zone is neutral, constituting a joining of the Russian platform with the fore-deeps. The names of geologists G. Kh. Dikensteyn and G.A. Lichagin are mentioned in the text. There are 1 map and 8 Soviet references.

PRESENTED: December 11, 1958, by V.G. Bondarchuk, Member of the AS UkrSSR

BONDARCHUK, V.G.; SOLLOGUB, V.B.; KOMDRACHUK, V.Yu.; KRUTIKHOVSKAYA, Z.A.; LEBEDEV, T.S.; MIKHAYLOVA, N.P.

Surface relief of the pre-Cambrian crystalline foundation in the Ukrainian and Moldavian S.S.R. Sov.geol. 2 no.1:41-55 Ja '59. (MIRA 12:4)

1. Institut geologicheskikh nauk AN USSR.
(Ukraine--Geology, Structural) (Moldavia--Geology, Structural)

LEBEDEV, T.S.; SOLLOGUB, V.B.

Contribution of Ukrainian scientists to research completed under the program of International Geophysical Year. Mezhdunar. geofiz. god [Kiev] no.2:3-31 '60. (MIRA 14:1)

1. Institute of Geological Science of the Academy of Science of the Ukrainian S.S.R.
(Ukraine—Geophysical research)

SEMENENKO, N.P., akademik, otv. red.; SUBBOTIN, S.I., akademik, red.; TKACHUK, L.G., doktor geol.-miner. nauk, zam. otv. red.; LAZARENKO, Ye.K., red.; BELEVTSEV, Ya.N., red.p POPOV, V.S., red.; SOLLOGUB, V.B., kand. geol.-miner. nauk, red.; ZAVIRYUKHINA, V.N., red.; MEL'NIK, A.F., red.; DAKHNO, Yu.B., tekhn. red.

[Materials of the Fifth Conference of the Carpatho-Balkan Geological Association]Materialy V s"ezda Karpato-Balkanskoi geologicheskoi assotsiatsii. Kiev, Izd-vo Akad. nauk URSR, 1962. 309 p. (MIRA 16:4)

1. Karpato-Balkanskaya geologicheskaya assotsiatsiya. 5. s"yezd.
2. Akademiya nauk Ukr.SSR (for Semenenko, Subbotin).
(Carpathian Mountains--Geology)
(Balkan Mountains--Geology)

SOLLOGUB, V.B.

Division of the southern part of the Ukraine and the Kuban into tectonic districts based on geophysical data. Geofiz.sbor. no.1: 3-10 '62. (MIRA 16:3)

1. Institut geofiziki AN UkrSSR.
(Ukraine--Geology, Structural) (Kuban--Geology, Structural)

SOLLOGUB, V.B.; CHEKUNOV, A.V.; KHILINSKIY, L.A.; GARKALENKO, I.A.

Results of experimental seismic studies of the internal structure of the crystalline basement in the northern part of the Krivoy Rog Basin. Geofiz.sbor. no.1:24-31 '62. (MIRA 16:3)

1. Institut geofiziki AN UkrSSR.
(Krivoy Rog Basin--Seismic prospecting)
(Krivoy Rog Basin--Geology, Structural)

SOLLOGUB, V.B.; LOSSOVSKIY, Ye.K.; KHILINSKIY, L.A.; GORBENKO, V.S.; SOKOLOV, B.N.; NIKIFORUK, B.S.

Use of high-frequency seismic prospecting for dividing metamorphic rock complex in the Belozerka iron-ore deposit. Geofiz.sbor. no.2:46-61 '62. (MIRA 16:3)

1. Institut geofiziki AN UkrSSR.
(Belozerka region (Zaporozh'ye Province)—Seismic prospecting)
(Belozerka region (Zaporozh'ye Province)—Crystalline and metamorphic)

PETKEVICH, Georgiy Ivanovich; SOLLOGUB, V.B., doktor geol.-miner. nauk, otv. red.; SERDYUK, O.P., red.; RAKHLINA, N.F., tekhn. red.; DAKHNO, Yu.B., tekhn. red.

[Factors determining seismic wave velocities in a geological cross section as revealed by a study made in the cis-Carpathian region] Faktory, opredeliaiushchie skorosti seismicheskikh voln v geologicheskom razreze (na primere Predkarpat'ia). Kiev, Izd-vo AN Ukr.SSR, 1963. 113 p. (MIRA 17:2)

SOLLOGUB, V.B.; CHEKUNOV, A.V.; KALYUZHNAYA, L.[illegible]; KHILINSKIY, L.A.; KHA[illegible]ECHKO, G.Ye.

Internal structure of the crystalline basement in the southwestern part of the Korosten' pluton according to seismic data. Geofiz. sbor. no. 5:122-130 '63. (MIRA 17:5)

1. Institut geofiziki AN Ukr SSR.

SOLLOGUB, V.B.; CHEKUNOV, A.V.; KALYUZHNAYA, L.T.; KHILINSKIY, L.A.

Deep-seated structure of Korosten' pluton according to seismic data. Dokl. AN SSSR 152 no.5:1215-1217 O '63. (MIRA 16:12)

1. Institut geofiziki AN UkrSSR. Predstavleno akademikom V.S. Sobolevym.

SUBBOTIN, S.I., akademik; SOLLOGUB, V.B.; CHEKUNOV, A.V.

Crustal structure of the basic structural elements of the Ukraine. Dokl. AN SSSR 153 no.2:440-443 N '63. (MIRA 16:12)

1. Institut geofiziki AN UkrSSR. 2. AN UkrSSR (for Subbotin).

SOLLOGUB, V.B.; CHEKUNOV, A.V.; PAVLENKOVA, N.I.; KHILINSKIY, L.A.

Nature of the Novotsaritsynskaya gravity anomaly in the Crimean plain according to seismic studies. Geofiz. sbor. no.8:3-12 '64. (MIRA 18:6)

1. Institut geofiziki AN UkrSSR.

[illegible] .I.; SOLLOGUB, V.B.; CHEKUNOV, A.V.

Characteristics of the elastic waves from the interface in the crystalline basement in the southern part of the Belozerka iron-ore region and its subsurface structure. Geofiz. sbor. no.8; 34-43 '64. (MIRA 18:6)

1. Institut geofiziki AN UkrSSR.

SOLLOGUB, V.B.; CHEKUNOV, A.V.; PAVLENKOVA, N.I.; GARKALENKO, I.A.; KHILINSKIY, L.A.; SHPORT, L.P.

Crustal structure of the Crimean plain and Sivash region according to geophysical data. Sov. geol. 7 no.8:44-56 Ag '64. (MIRA 17:10)

1. AN UkrSSR.

SEMENENKO, N.P.; SUBBOTIN, [illegible] SOLOGUB, V.B.; IVANTISHIN, M.N.; CHEKUNOV, A.V.; JADIYEV, V.B.

Structure of the abyssal zones of the earth's crust in the Ukrainian Crystalline Shield. Sov. geol. 7 no.11:48-60 N '64. (MIRA 18:2)

1. Institut geofiziki AN UkrSSR.

GRIN', Nikolay Yevdokimovich [Hryn', M.IE.]; SOLLOGUB, V.B. [Sollohub, V.B.], doktor geol.-miner. nauk, otv. red.; SERDYUK, O.F., red.

[Interference and wave spectra in seismic prospecting] Interferentsiia i spektry khvyl' u seismorozvidtsi. Kyiv, Naukova dumka, 1965. 126 p. (MIRA 18:8)

SEMENENKO, N.P., akademik, otv. red.; TKACHUK, L.G., doktor geol.-miner. nauk, zam. otv. red.; VYALOV, O.S., red.; PORFIR'YEV, V.B., red.; SUBBOTIN, S.I., red.; LAZARENKO, Ye.K., red.; BELEVTSEV, Ya.N., red.; POPOV, V.S., red.; SOLLOGUB, V.B., doktor geol.-miner. nauk, red.; CHEKHOVICH, N.Ya., red.; BYCHKOVA, R.I., red.

[Materials of the Sixth Congress of the Carpatho-Balkan Geological Association; reports of the Soviet geologists] Materialy VI s"ezda Karpato-Balkanskoi geologicheskoi assotsiatsii; doklady sovetskikh geologov. Kiev, Naukova dumka, 1965. 461 p. (MIRA 18:10)

1. Karpato-Balkanskaya geologicheskaya assotsiatsiya. 6.s"yezd. 2. AN Ukr.SSR (for Semenenko). 3. Chlen-korrespondent AN Ukr.SSR (for Lazarenko, Belevtsev, Popov).

SOLLOGUB, V.B.; GARKALENKO, I.A.; CHEKUNOV, A.V.

Tectonic structure of the northwestern part of the Black Sea based on geophysical data. Dokl. AN SSSR 162 no.6:1374-1377 Je '65. (MIRA 18:7)

1. TSentral'naya geofizicheskaya ekspeditsiya Gosudarstvennogo geologicheskogo komiteta SSSR i Institut geofiziki AN UkrSSR. Submitted August 20, 1964.

SOLLOGUB, V.B., doktor geol.-min.nauk; CHEKUNOV, A.V.; KALYUZHNAYA, L.T.; KHILINSKIY, L.A.

Structure of the upper part of the crystalline crust in the Obruch synecline region based on seismic data. Geofiz.sbor. no.1:18-26 '65. (MIRA 18:12)

1. Institut geofiziki AN UkrSSR. Submitted June 19, 1964.

SOLLOGUB, V.B., doktor geol.-min.nauk; CHEKUNOV, A.V.; PAVLENKOVA, N.I.; KALYUZHNAYA, L.T.

Some characteristics of the wave pattern in the crustal fault zones of the Ukrainian S.S.R. Geofiz.sbor. no.1:32-39 '65. (MIRA 18:12)

1. Institut geofiziki AN UkrSSR. Submitted November 10, 1964.

ACC NR: AP7005453 SOURCE CODE: UR/0021/66/000/009/1194/1197

AUTHOR: Sollogub, V. B.; Cholanov, A. V.

ORG: Institute of Geophysics AN UkrSSR (Instytut geofizyky AN UkrSSR)

TITLE: Crustal structure in the vicinity of mountainous Crimea

SOURCE: AN UkrRSR. Dopovidi, no. 9, 1966, 1194-1197

TOPIC TAGS: Mohorovicic discontinuity, physical geology

ABSTRACT: The existence of Crimean mountain "roots" is proven as a result of seismic research. The Mohorovicic discontinuity is submerged under the mountains along zones of marginal abyssal fractures at a depth of 50 km. The basaltic layer is found to be very thick and its surface is uplifted. It is one of the factors causing the presence of positive gravitational anomalies in mountainous Crimea. This paper was presented by Academician AN UkrSSR S. I. Subbotin. Orig. art. has: 1 figure.
[JPRS: 38,677]

SUB CODE: 08 / SUBM DATE: 16Sep65 / ORIG REF: 017 / OTH REF: 007

Card 1/1 0926 2331

ACC NR: AT6028370 (N) SOURCE CODE: UR/0000/65/000/000/0056/0069

AUTHOR: Subbotin, S. I.; Gurevich, B. L.; Sollogub, V. B.; Chekunov, A. V.; Chirvinskaya, M. V.; Kuzhelov, G. K. (Deceased)

ORG: none

TITLE: Deep-seated structure of the Ukraine, based on data from geophysical investigations

SOURCE: International Geological Congress. 22d, New Delhi, 1964. Geologicheskiye rezul'taty prikladnoy geofiziki (Geological results of applied geophysics); doklady sovetskikh geologov, problema 2. Moscow, Izd-vo Nedra, 1965, 56-69

TOPIC TAGS: tectonics, upper mantle, earth crust, stratigraphy / Ukraine

ABSTRACT: Geological and particularly geophysical investigations have located a great number of deep-seated faults in the Ukraine. These faults have mainly northeast and northwest strikes. The northeast-strike faults predominate in the Ukrainian shield, the Black Sea depression, and the northern part of the Black Sea basin, while northwest-strike faults are typical of the Dneprovsko-Donetskaya depression, the Trans-Carpathian depression, the folded Carpathians, the Carpathian foredeep and the southwestern part of the Russian platform. For the area, as a whole, it has been found that the macrostructural features of deep-seated faults have longitudinal or transverse strikes. Tectonic movements in the Earth's crust

Card 1/2

ACC NR: AT6028370

are mainly caused by compression and expansion of the mantle associated with polymorphic, phase and electron transformations, or chemical alterations. Deep-seated faults originate in the upper mantle hundreds or at least tens of km deep. The main types of faults located in the Ukraine are: 1) ancient Proterozoic faults in the Precambrian basement; 2) faults of different ages, expressed in the basement as major stages and separating principal structural features or their components; and 3) transverse (sometimes longitudinal) faults cutting across the main structures and separating them into individual blocks. In addition, there are many faults in the sedimentary strata which are directly or indirectly associated with the block movement of the basement. The study of the deep-seated crustal structure of the main geotectonic features of the Ukraine is based upon geophysical, mostly seismic, investigations. The block-type structure of the crust has been established, and a number of deep-seated faults have been located. A general feature is increased crustal thickness under uplifts and decreased thickness under depressions. It has been found that the granite layer contains shallow gently sloping seismic discontinuities, which may either separate different structural stages and rock complexes or represent purely physical boundaries. The Ukraine has been divided into structural zones on the basis of geological and geophysical data, and detailed characteristics of all zones are given. Orig. art. has: 2 figures.

SUB CODE: 08/ SUBM DATE: 06Jan65/ ORIG REF: 025/ OTH REF: 006/

Card 2/2

ACC NR: AR6024835 SOURCE CODE: UR/0169/66/000/004/G003/G003

AUTHOR: Subbotin, S. I.; Gurevich, B. L.; Kuzhelov, T. K.; Sollogub, V. B.; Chekunov, A. V.; Chirvinskaya, M. V.

TITLE: The plutonic formation on the territory of the Ukrainian SSR according to data from a geophysical study

SOURCE: Ref. zh. Geofizika, Abs. 4G13

REF SOURCE: Sb. Geol. rezul'taty prikl. geofiz. Geofiz. issled. stroyeniya zemn. kory. M., Nedra, 1965, 56-59

TOPIC TAGS: geological survey, area description, geomagnetic field

ABSTRACT: The main relationship between the anomalous gravitational field and the geological structure of the territory in question is the linearity of the field in the regions of deep submersion of the Precambrian foundation and the mossaic-like arrangement of the shallow surface Precambrian bed. The geomagnetic field anomlies mainly reflect the internal structure of the Precambrian foundation, i.e., Proterozoic folded linear regions and prehistoric plutonic localized objects of the basic and ultrabasic rock. In the regions where large subcambrian deposits were formed the geomagnetic field anomalies mainly reflect the presence of shallow effusive bedrock. A large number of plutonic breaks and "feathered" cracks were established from the data of seismometry, gravimetry, and by other geophysical methods. The thickness of the

UDC: 550.311(477)

Card 1/2

ACC NR: AR6024835

Earth's core and the depth of the Konrad surface bed are estimated from the seismic and gravimetric data and foundation rocks. Generally speaking the geophysical methods are very important in the exposure of structural forms at various depths and in the detailed study of large and small tectonic elements. [Translation of abstract]
M. Speranskiy

SUB CODE: 08

Card 2/2

ACC NR: AT7003131 SOURCE CODE: UR/3169/66/000/018/0003/0018

AUTHOR: Sollogub, V. B.; Garkalenko, I. A.,Trifonov, P. G.; Chekunov, A. V.; Kalyuzhnaya, L. T.; Khilinskiy, L. A.

ORG: Geophysics Institute AN UkrSSR. (Institut geofiziki AN UkrSSR); Dneprogeofizika Trust (Trest "Dneprogeofizika")

TITLE: Deep structure of the Earth's crust in the Belozersk iron ore region based on seismic data

SOURCE: AN UkrSSR. Geofizicheskiy sbornik, no. 18, 1966. Geofizicheskiye issledovaniya stroyeniya zemnoy kory (Geophysical investigations of the structure of the earth's crust), 3-18

TOPIC TAGS: geologic survey, earth crust, seismology, petrology, mineralogy

ABSTRACT: Seismic investigations of the Belozersk iron ore region revealed that the basement in the region is composed of the earliest Precambrian formations and the basaltic shell is greatly uplifted. Hence it is natural to assume that a block of the Earth's crust has been elevated in the Belozersk region relative to adjacent regions. This uplifting of the block of the basaltic shell occurred along the ancient Belozersk submeridional deep fault zone and was accompanied by the penetration and fusion of basic and ultrabasic rock varieties in the upper levels of the crust. A comparison of the structural map of the surface of the basaltic

Card 1/2

ACC NR: AT7003831

shell with the gravimetric map revealed their good qualitative agreement. Thus the gravity anomalies in the Belozersk region are due not to petrographic inhomogeneities of the basement but mainly to the surface relief of the basaltic shell. It is assumed that in other regions of the Ukrainian shield the main gravitational effect is also produced by density boundaries within the Precambrian strata. In the overall qualitative conformity of the gravitational map of the basaltic shell of the Belozersk region, no direct relation was found between the magnitude of the anomalies and the depths to the basalt. This was apparently due primarily to density inhomogeneities in the basaltic shell itself. Orig. art. has: 10 figures.

SUB CODE: 08/ SUBM DATE: 20Nov65/ ORIG REF: 025

Card 2/2

ACC NR: AT6034514 SOURCE CODE: UR/0000/66/000/000/0156/0162

AUTHOR: Sollogub, V. B.; Chekunov, A. V.; Pavlenkova, N. I.

ORG: none

TITLE: Structure of the Earth's crust in the southern Ukraine based on deep seismic sounding data

SOURCE: AN SSSR. Otdeleniye nauk o Zemle. Nauchnyy sovet po kompleksnym issledovaniyam zemnoy kory i verkhney mantii. Glubinnoye stroyeniya Kavkaza (Abyssal structure of the Caucasus). Moscow, Izd-vo Nauka, 1966, 156-162

TOPIC TAGS: Mohorovicic discontinuity, granitic layer, basaltic layer, earth crust, seismic velocity, crystalline basement, seismology, tectonics / Ukraine

ABSTRACT: The results are presented of regional seismic investigations conducted in the southern Ukraine in 1961—1962 by the correlation method of refracted waves and deep seismic sounding using continuous profiling. Borehole and available geophysical data were utilized in compiling a structural schematic map of the Crimean Plateau and Prisivash'ye along the surface of the Paleozoic basement. It was established that the basement has a block structure. A system of submeridional and sublatitudinal faults disects the territory into a number of large structures. The Paleozoic basement lies at depths ranging from 0—1 to 6—9 km. The seismic data do not confirm that the transverse Perekop uplift is the boundary between the Karkinitskaya and Sivashskaya depressions. The Novo-Tsarin gravity anomaly is

Card 1/2

ACC NR: AT6034514

attributed to the deep-seated fault containing intrusions of basic and ultrabasic rocks. A seismic-geologic iron section of the Earth's crust along the voronzh massif—Black Sea profile was prepared from available deep-seismic data. Up to 4 interfaces with boundary velocities between 6.6 and 7.1 km/sec have been established at depths of 1.5 to 10 km below the crystalline basement in the area of the southern slope of the Ukrainian shield. The basaltic layer with a boundary velocity of 6.6—7.4 km/sec is found along the whole profile at depths between 5—8 and 18—20 km. The Mohorovicic discontinuity with a boundary velocity of 8.1—8.2 km/sec was also traced along the whole seismic line. The depth to the Mohorovicic discontinuity varies from 22—30 km in the region of the Black Sea to 45—50 km in the Crimean Mountains and the Dnieper-Donets aulowgene. Orig. art. has: 2 figures. [WA-794]

SUB CODE: 08/ SUBM DATE: 26Feb66/ ORIG REF: 023/

Card 2/2

KOZHEVIN, V.G.; AFONIN, A.A.; FAT'YANOV, N.M.; SOLLOGUB, V.P.; KOZYUBERDA, A.F., gornyy inzhener; PRYAKHIN, V.A.; SHINKOVSKIY, A.V.; SUKHACHEV, D.A.

Let's be ready for the tenth celebration of Miners' Day with new industrial achievements. Ugol' 32 no.8:4-17 Ag '57. (MLRA 10:9)

1. Kemerovskiy Sovnarkhoz (for Kozhevin). 2. Glavnyy inzhener tresta Pervomayskugol' (for Afonin). 3. Glavnyy inzhener tresta Mezvetayantratsit (for Fat'yanov). 4. Glavnyy inzhener tresta Kopeyskugol' (Sollogub). 5. Ayutinskoye shakhtoupravleniye (for Kozyuberda). 6. Shakhta im. Rumyantseva tresta Kalininugol' for Pryakhin). 7. Nachal'nik ordena Lenina shakhty No.9 tresta Snezhnyanantratsit (for Shinkovskiy). 8. Nachal'nik shakhty No.22 "Lomintsevskaya tresta Shchekinugol' (for Sukhachev).

(Coal mines and mining)

S/169/61/000/008/030/053
A006/A101

AUTHOR: Sollogub, Z. R.

TITLE: Synoptic conditions of glazed frost formation in Northern Caucasus and in the south-east of the European territory of the USSR

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 8, 1961, 50, abstract 8B332 ("Sb. po regional'n. sinoptike", no. 4, Moscow, 1960, 69-95)

TEXT: Glazed frost in the south-east of the European territory of USSR and in Northern Caucasus arises within a period from October until March. In the limit months of this period the number of cases is insignificant, and a maximum is observed in December. The majority of cases of glazed frost (70%) arises at a temperature of -0.1 to -0.4°C (-12°C is the extreme limit temperature) and at weak and moderate winds of eastern and south-western directions. Groups and types of synoptic processes causing glazed frost of different intensity were established. Most dangerous is the outbreak of southern cyclones from the Black Sea when the glazed frost is most intensive and prolonged. Recommendation as to the prognosis of the intensity and localization of glazed frost are given which are based on a detector of synoptic processes mentioned. The forecast is deter-

Card 1/2

S/169/61/000/008/030/053
A006/A101

Synoptic conditions of glazed frost ...

mined from the temperature in warm and cold air masses near the ground and 850mb surface height, the velocity of front and cyclone movements, and the prevailing nature of precipitates. The results of experimental forecasting are entirely satisfactory. There are 12 references.

L. K.

[Abstracter's note: Complete translation]

Card 2/2

SOLIORZ, Jerzy, mgr inz.

Export and anti-import. Chemik 16 no. 5:159 My '63.

1. Politechnika Slaska, Gliwice.

KOWALSKA, Eugenia, doc.; SOLLORZ, Jerzy, mgr

Complexometric determination of calcium in orthophosphoric acid solutions after separation of phosphate ions on anion exchangers. Chem anal 9 no.2:349-352 '64.

1. Department of General Chemistry A, Technical University, Gliwice.

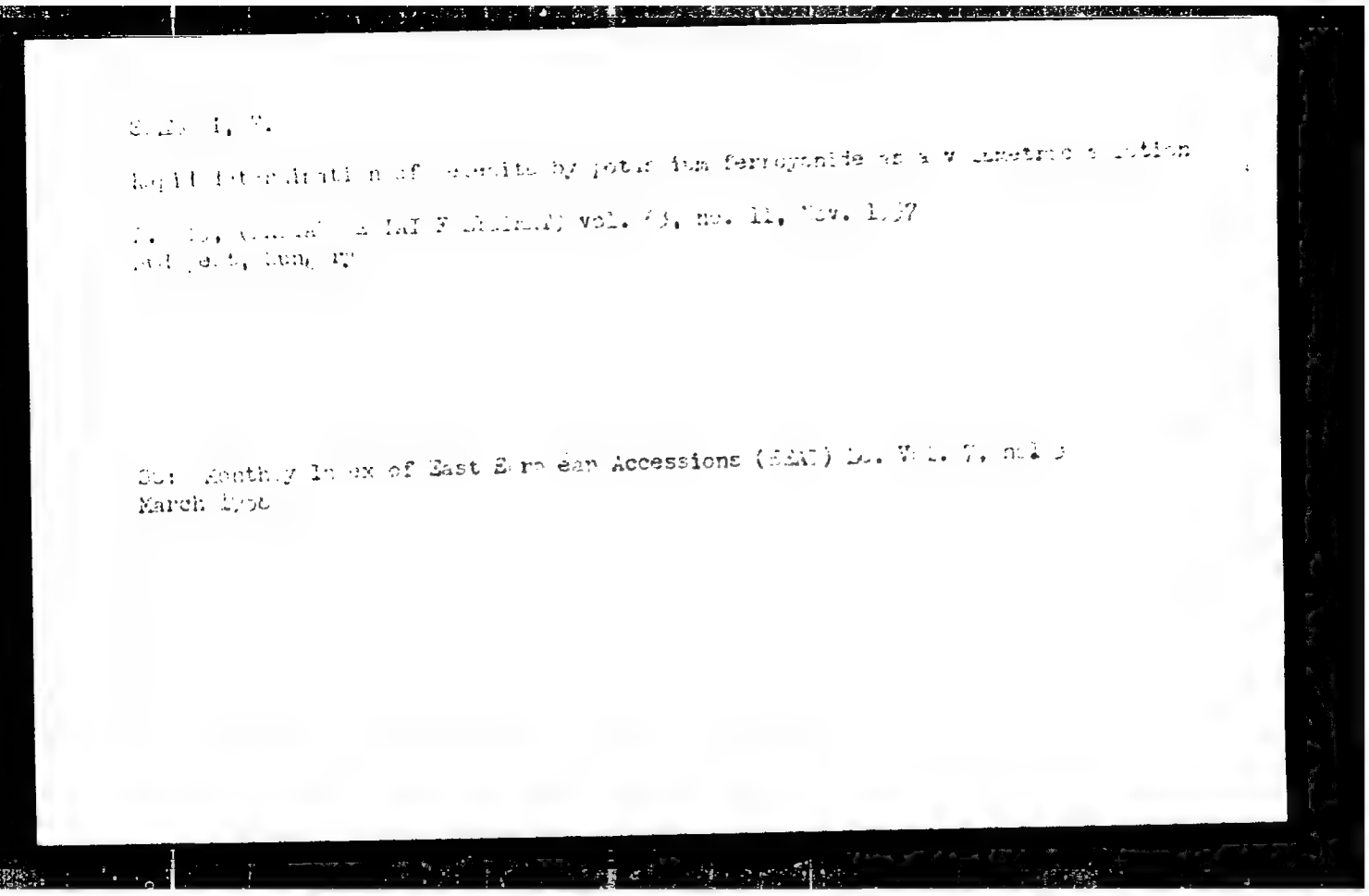
SOLMATOV, U. B.

"Study of Transistor Characteristics on an Oscillographic Characteriograph," by A. M. Bonch-Bruyevich and U. B. Solmatov, Radiotekhnika i Elektronika, No 3, Mar 57, pp 311-316

Due to a considerable spread in the properties of transistors manufactured, their characteristics have to be checked for each unit separately to establish their fitness for specific application. To facilitate the testing of transistors manufactured, a device was developed to record simulataneously four families of static characteristics. Such a device was called an oscillographic characteriograph.

The circuit of this characteriograph consists of the following components: multivibrator, intensity gate generator, saw-toothed oscillator, step-by-step voltage generator, emitter feed block, collector feed block, and oscillograph. Characteristics of transistors S1B and P1A were studied for various ambient temperatures. (U)

Sum. 1391



[illegible] I. V.

[illegible] determination of [illegible] by [illegible] from ferrocyanide as a volumetric solution

[illegible] Zavodskaya Laboratoriya, vol. 23, no. 11, Nov. 1957
[illegible], Kiev, USSR

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 3
March 1958

Solmosi, F.

S/195/63/004/001/006/009
E075/E436

AUTHORS: Shol'moshi, F., Reves, L.

TITLE: Catalysis of reactions in the solid state. Thermal decomposition of ammonium perchlorate in the presence of iron oxide

PERIODICAL: Kinetika i kataliz, v.4, no.1, 1963, 88-96

TEXT: The kinetics of the decomposition of pure NH_4ClO_4 were studied first. The decomposition between 215 and 234.5°C occurred to the extent of 31 to 34% with the activation energy ranging from 29.6 to 34.9 kcal/mole and induction periods from 61 to 218 min. Above 240°C the decomposition proceeded more rapidly, also to the extent of 31 to 33%, and with an activation energy of 31.6 kcal/mole. With the addition of Fe_2O_3 the decomposition below 240°C took place with shortened induction periods and slightly increased rates. For the mixtures containing 50% Fe_2O_3 the extent of the decomposition reached 40 to 45%. Between 240 and 300°C, 60 to 95% of NH_4ClO_4 was decomposed with short induction periods (9 to 23 minutes). The decomposition rate was doubled when the content of Fe_2O_3 increased from 2 to 20%.

Card 1/2

Catalysis of reactions ...

Mixtures containing 2, 5 and 12% Fe_2O_3 were also investigated between 300 and 380°C. At these temperatures the first stage of the reaction (approx. 30% decomposition) was completed in 2 to 3 min followed by a slow further decomposition. The activation energies were 40.9, 30.9, 25.7 and 22.0 kcal/mole for the mixtures containing 0, 2, 5 and 12.5% Fe_2O_3. By comparing the activation energies for the decomposition of pure NH_4ClO_4 with those for the decomposition of its mixtures with Fe_2O_3, it was concluded that the mechanism of decomposition of the mixtures is electronic by nature. Apparently Fe_2O_3 accelerates the transfer of electrons from anions to cations, i.e. it promotes the formation of NH_4 and ClO_4 radicals which decompose to gaseous products. There are 10 figures and 10 tables.

ASSOCIATION: Institut neorganicheskoy i analiticheskoy khimii pri Universitete g. Seged, Vengriya (Institute of Inorganic and Analytical Chemistry at Szeged University (Hungary))

SUBMITTED: December 12, 1961

Solms J.

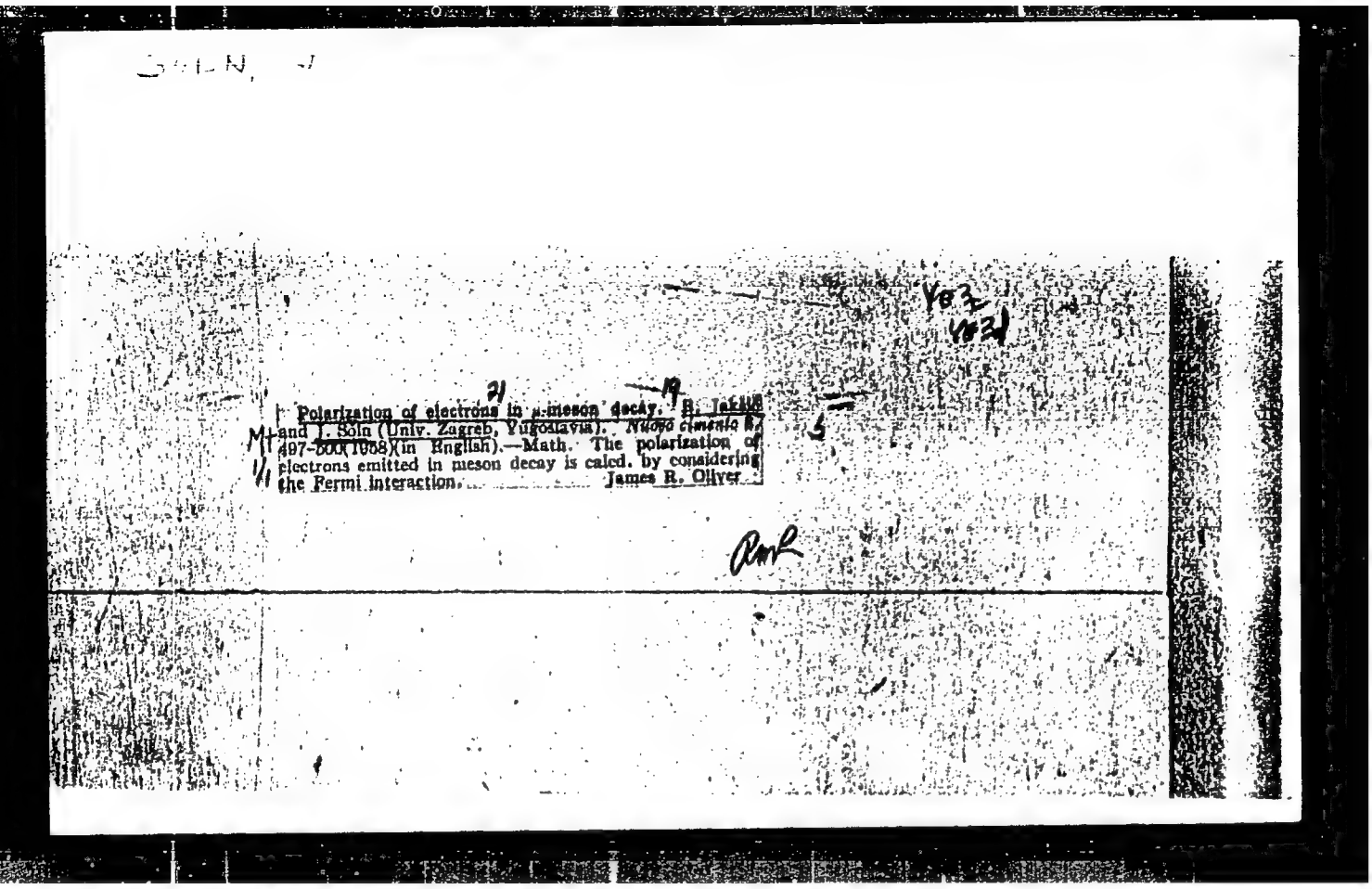
3

Preparation of sodium pectates from sugar beet pulp and their characteristics. H. Deuel, L. Anyas-Weisz, and J. Solms. *Gaz. Cukrownicza* 58, 110–12(1956).—Fresh sugar beets were ground, extd. with 60% alc. at 70°, and dried; the yield of the air-dried residue was 5.4%; the amt. of pectic acid (I) 16.72–16.75 and CH_3COO groups 3.44–5.85% of the residue. On sapon., followed by acidification, $CaCl_2$ pptn., HCl-alc. washing, treating with a Na^+ cycle resin, and alc. pptn. Na pectate (II) was obtained in the amt. of 36–50% of the I present in the beet dry pulp. Three different prepns. of II showed the following analyses: water 8.2–8.4, ash 6.2–7.9, pure II 37.4–53.5, and calcd. residual substances 30.4–48.0%. — B. Wierbicki

DIMITRIU, C. C., Prof.; RIMNICEANU, R., dr.; GEORGESCU, St., dr.; SOLMU, I., dr.; BULIGESCU, L., dr.; HULUBEL, P., dr.

Study of the effects of heparin in angor and in sequelae of myocardial infarct; clinical and electrophoretic results. Med. int., Bucur. 8 no.3:375-379 July 56.

1. Lucrare efectuata in clinica medicala Spitalul "dr. Carol Davila."
(ANGINA PECTORIS, therapy
heparin, clin. & electrophoretic results)
(MYOCARDIAL INFARCT, complications
ther., heparin, clin. & electrophoretic results)
(HEAPARIN, ther. use
angina pectoris & seq. of myocardial infarct. clin. & electrophoretic results)



Polarization of electrons in μ-meson decay. B. Jakšić and J. Šoln (Univ. Zagreb, Yugoslavia). *Nuovo cimento* 8, 497–500 (1958) (in English).—Math. The polarization of electrons emitted in meson decay is calcd. by considering the Fermi interaction. James R. Oliver

C

YUGOSLAVIA/Nuclear Physics - Elementary Particles.

Abs Jour : Ref Zhur Fizika, No 9, 1959, 19620

Author : Jaksii, B., Soln, J.

Inst : Zagreb, Yugoslavia

Title : -Meson Decay and the Non-Conservation of Parity

Orig Pub : Glasnik mat.-fiz. i astron., 1958, 13, No 2, 125-137

Abstract : The energy spectrum, the angular distribution, and the polarization of electrons emitted in the decay of polarized mesons are calculated for the four-fermion interaction of general form under the assumption of an arbitrary degree of parity non-conservation in μ decay (see also Ref Zhur Fizika, 1958, No 8, 17433). The formulas obtained contain ten real parameters α_i, which are bilinaar combinations of ten, generally, speaking, complex coupling constants, that enter into the

Card 1/2

SOLNAR, Vladimir

European Symposium on Criminal Law in Bressanone. Vestnik CSAV 70 no.5:742-743 '61.

1. Clen korespondent Ceskoslovenske akademie ved.

SOLNAR, Vladimir

International Association for Criminal Law. Vestnik CSAV 71 no.5:576-577 '62.

1. Clen korespondent Ceskoslovenske akademie ved.

B. SOLNAROVA

"Changers of albumins as seen by an economist." p. 65. (VYZIVA LIDU, Vol. 8, no. 4, Apr. 1953, Praha, Czechoslovakia.)

SO: Monthly List of East European Accessions, L.C., Vol. 2 No. 7, July 1953, Uncl.

L 19465-65 EWT(d)/EWP(1) Po-4/Pq-4/Pg-4/Pk-4/Pl-4 IJP(c)/AEDC(a)/
SSD/ASD(a)-5/ASD(s)/AFMDC/APETR/RAEM(a)/AFTC(p)/RAEM(d)/ESD(dp) MLK/BC
ACCESSION NR: AT4047744 S/0000/64/000/000/0082. 3

AUTHOR: Solnechny*y, E. M.

TITLE: Crudity of system motion and crudity of linear systems with constant parameters

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Teoriya i primeneniye avtomaticheskikh sistem (Theory and application of automatic systems). Moscow, Izd-vo Nauka, 1964, 82-87.

TOPIC TAGS: automatic control, automatic control design, automatic control system, automatic control theory

ABSTRACT: The concept of crudity introduced by A. A. Andronov, et al. ("Theory of Oscillations," Fizmatgiz, 1959) is applicable only to systems describable by ordinary Cauchy-type differential equations with time-independent right-hand members. The present article proposes a concept of crudity which is a generalization of Lyapunov's stability and applicable to the individual motions of a system. Some indicants of the crudity based on a Laplace transform of a motion-describing

Card 1/2

L 19465-65
ACCESSION NR: AT4047744

function are established. A definition of the "crudity of motion," i.e., the stability with respect to a parameter, is formulated, as well as necessary and sufficient conditions of crudity in a single-variable system. A concept of "generalized crudity" is introduced to cover linear systems with motions containing δ-functions or first-kind steps. The crudity of response of a linear stationary system to an input variable is considered; the system is called crude (or generally crude, or asymptotically crude) with respect to a parameter if the system's transient response is crude with respect to this parameter. The crudity of a linear system with concentrated parameters and delays is also considered. Finally, the concept of an "integral-square crudity" is introduced and defined. Orig. art. has: 2 figures and 67 formulas.

ASSOCIATION: none

SUBMITTED: 06Jun64 ENCL: 00

SUB CODE: IE NO REF SOV: 006 OTHER: 000

Card 2/2

SOLNECHNYY, E. M.

PHASE I BOOK EXPLOITATION SOV/4403

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki

Avtomaticheskoye upravleniye; [sbornik rabot] (Automatic Control; Collected Works) [Moscow] Izd-vo AN SSSR [1960] 437 p. Errata slip inserted. 5,500 copies printed.

Ed.: Ya.Z. Tsypkin, Doctor of Technical Sciences, Professor; Ed. of Publishing House: Ye.N. Grigor'yev; Tech. Ed.: S.A. Astaf'yeva.

PURPOSE: This collection of reports is intended for scientists and engineers engaged in the study of automation.

COVERAGE: The collection contains reports presented at the 6th Conference of Young Scientists of the Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics of the Academy of Sciences USSR) in January 1959. The collection covers a wide range of scientific and technical problems connected with automatic control. No personalities are mentioned. References accompany each report.

Kozlov, N.P. Study of Hydraulic Vibro-Circuit Dynamics 83
After discussing various factors which have a negative influence on servo-
mechanisms with high output power, the author notes that the combination
of high sensitivity of servomechanisms with high-power output requires
additional amplification which in turn results in instability, especially
in high-speed systems. A considerable improvement in servomechanism
operation could be achieved by the introduction of additional vibrations
of a selected frequency and amplitude, superimposed on the command signal.
This will result in the optimization of the transient and in the lineari-
zation of the nonlinear system. Although electrical or mechanical vibra-
tors are conventionally used in optimalizing systems, it would be possible
to use a hydraulic vibrator. The author presents a detailed mathematical
analysis of the operation of a hydraulic "vibro-circuit" developed under
the supervision of V.V. Petrov, and also includes basic directions for its
design. There are 3 references, all Soviet.

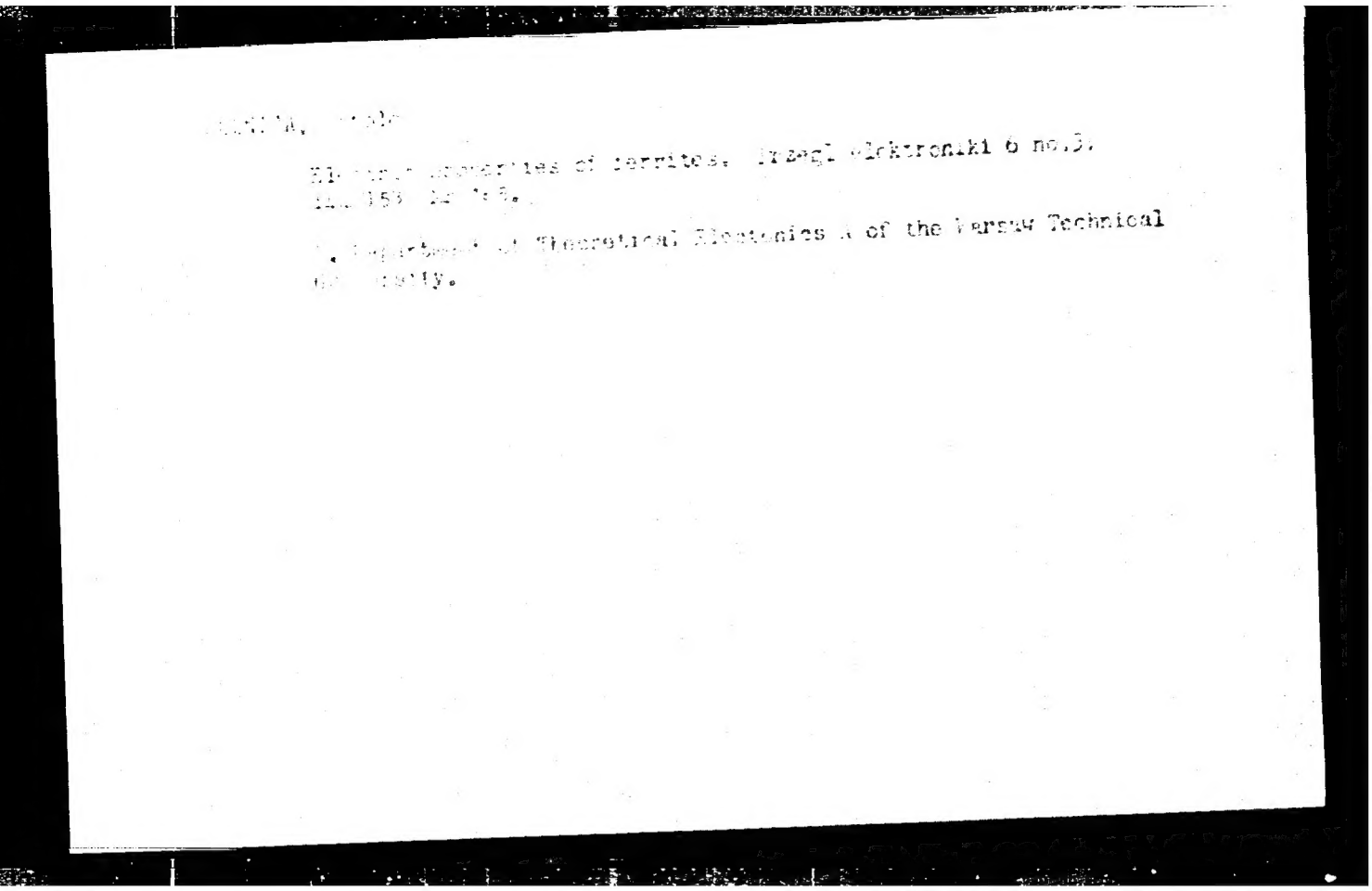
Mikhlin, I.A. Automation of Evaporators in Sugar Plants 95
The author describes theoretical and experimental investigations of standard
evaporators as objects of automatic control. This work was made under the
direction of Professor V.A. Lossiyevskiy, Doctor of Technical Sciences and
with technical consultation of Professor P.M. Silin, Honored Scientist.

Pryakhin, I.I. Compensation of the Delay Effect in Pulse-Width Systems of 107
Automatic Control
The author presents a method of delay compensation in control systems
with pulse-width modulation which are essentially nonlinear. He demon-
strates that, in the presence of external tuning and load stimuli the
control system which shapes the signal at the input of the pulse com-
ponent should contain an extrapolator, a nonlinear discrete filter,
and an interpolator. The author presents a mathematical analysis for
the determination of the parameters of such systems. There are 10 ref-
erences: 6 Soviet, and 4 English.

Solnechnyy, E.M. Selection of Measured Coordinates and Regulating Elements 117
in a Control System With Several Controlled Quantities
The author presents a more general statement of the problem of multi-
coupled control systems, namely the problem of creating a controller
which would ensure the desired form of transfer functions from each of
the considered disturbances (acting upon the equipment) to each of the
controlled quantities. He concludes that the necessary conditions ob-
tained in this work permit only the selection of the number of measured
coordinates and of regulating elements and also to pre-establish on
principle the ineffective variants of the control system structure. There
are 6 references, all Soviet.

SOLNICA, Witold

Galvanomagnetic phenomena. Przegl elektroniki 3 no.10:625-629 O '62.



[illegible]A, [illegible]

[illegible] properties of ferrites. Prz[illegible]gl elektroniki 6 no.3, 153 [illegible].

[illegible] of Theoretical Electronics A of the Warsaw Technical [illegible]ity.